

ABSTRACT

This invention provides a platform and stage support apparatus and method that isolates the platform from vibration and maintains platform position within an exposure apparatus while the stage is moved about. The apparatus includes a base, platform, stage, pneumatic and electromagnetic supports from the base to the stage, and a controller for positioning the platform in response to data from stage and platform position sensors and pneumatic support pressure sensors. The method includes using a model that provides a target pressure for each pneumatic support in response to an input stage location. The apparatus and method use the pneumatic supports to carry the majority of platform and stage weight, thus requiring less force from the electromagnetic supports to maintain a desired platform position.